

IN THE UNITED STATES DISTRICT COURT  
FOR THE MIDDLE DISTRICT OF NORTH CAROLINA

FUMA INTERNATIONAL LLC,  
an Ohio limited liability company,

*Plaintiff/Counterdefendant,*

v.

R.J. REYNOLDS VAPOR  
COMPANY,  
a North Carolina corporation,

*Defendant/Counterplaintiff.*

Civil Action No. 1:19-cv-260

and

Civil Action No. 1:19-cv-660

**MEMORANDUM IN SUPPORT OF REYNOLDS'S MOTION  
TO EXCLUDE THE TESTIMONY AND OPINIONS  
OF STEPHEN A. HOLZEN ON DAMAGES**

## **TABLE OF CONTENTS**

I.	INTRODUCTION .....	1
II.	STATEMENT OF FACTS .....	4
	A.    The Patented Arrangement.....	4
	B.    Reynolds’s Accused Products .....	5
	C.    Mr. Holzen’s BOM Methodology .....	5
III.	LEGAL STANDARD.....	7
IV.	ARGUMENT .....	10
	A.    Mr. Holzen’s Inflated Royalty Rate Improperly Fails To Measure The Incremental Value Of The Patented Arrangement.....	10
	1.    Mr. Holzen’s BOM Methodology Depends on Using Irrelevant Manufacturing Costs As An Unreliable Proxy For Patented Value .....	11
	2.    Mr. Holzen’s BOM Methodology Improperly Ignores Or Minimizes Reynolds’s Contributions .....	16
	B.    Mr. Holzen’s Consideration Of The <i>Georgia-Pacific</i> Factors Does Not Salvage His Unreliable Apportionment Methodology.....	20
	C.    Mr. Holzen’s Opinion That The Patented Arrangement Drives Demand For The Accused Products Is Also Unreliable and Inadmissible.....	22
	D.    Mr. Holzen’s BOM Methodology Is Unreliable When Applied To The CIRO.....	24
	E.    Mr. Holzen’s Lump Sum Royalty Is Inadmissible Because It Is Based On Speculative And Highly Prejudicial Future Sales That Are Unlikely To Occur.....	25
V.	CONCLUSION.....	28

## TABLE OF AUTHORITIES

	<b>Page(s)</b>
<b>Cases</b>	
<i>Bmc Software, Inc. v. Servicenow, Inc.</i> , No. 2:14-CV-903-JRG, 2016 WL 379620 (E.D. Tex. Feb. 1, 2016) .....	19
<i>Daubert v. Merrell Dow Pharms., Inc.</i> , 509 U.S. 579 (1993) .....	3, 7, 12, 28
<i>E.E.O.C. v. Freeman</i> , 778 F.3d 463 (4th Cir. 2015) .....	7
<i>ePlus, Inc. v. Lawson Software, Inc.</i> , 764 F. Supp. 2d 807 (E.D. Va. 2011) .....	10, 25, 27
<i>Exmark Mfg. Co. Inc. v. Briggs &amp; Stratton Power Prods.</i> , 879 F.3d 1332 (Fed. Cir. 2018) .....	<i>passim</i>
<i>IP Innovation L.L.C. v. Red Hat, Inc.</i> , 705 F. Supp. 2d 687 (E.D. Tex. 2010) (Rader, C.J.) .....	8
<i>LaserDynamics v. Quanta Computer, Inc.</i> , 694 F.3d 51 (Fed. Cir. 2012) .....	22, 23, 24
<i>Lucent Techs., Inc. v. Gateway, Inc.</i> , 580 F.3d 1301 (Fed. Cir. 2009) .....	9, 11, 25
<i>MyGallons LLC v. U.S. Bancorp</i> , 521 F. App'x 297 (4th Cir. 2013) .....	10, 27
<i>Power Integrations, Inc. v. Fairchild Semiconductor Int'l, Inc.</i> , 904 F.3d 965 (Fed. Cir. 2018) .....	9, 22
<i>Procter &amp; Gamble Co. v. Paragon Trade Brands, Inc.</i> , 989 F. Supp. 547 (D. Del. 1997) .....	20
<i>Rembrandt Social Media, LP v. Facebook, Inc.</i> , 22 F.Supp.3d 585 (E.D. Va. 2013) .....	9

<i>Suffolk Techs. LLC v. AOL Inc.</i> , No. 1:12-cv-625, 2013 U.S. Dist. LEXIS 64630 (E.D. Va. Apr. 12, 2013) .....	8
<i>Sundance, Inc. v. DeMonte Fabricating Ltd.</i> , 550 F.3d 1356 (Fed. Cir. 2008) .....	7
<i>SUNOCO Partners Mktg. &amp; Terminals L.P. v. Powder Springs Logistics, LLC</i> , No. CV 17-1390-LPS-CJB, 2020 WL 7330715 (D. Del. Jan. 13, 2020) .....	19
<i>Syneron Med. Ltd. v. Invasix, Inc.</i> , No. 8:16-cv-00143-DOC-KES, 2018 WL 4696969 (C.D. Cal. Aug. 27, 2018) .....	12
<i>TCL Commc’ns Tech. Holdings Ltd v. Telefonaktenbologet LM Ericsson</i> , No. CV 15-02370 JVS, 2017 WL 11598725 (C.D. Cal. Feb. 2, 2017) .....	12
<i>Trell v. Marlee Elecs. Corp.</i> , 912 F.2d 1443 (Fed. Cir. 1990) .....	12
<i>Uniloc USA, Inc. v. Microsoft Corp.</i> , 632 F.3d 1292 (Fed. Cir. 2011) .....	<i>passim</i>
<i>VirnetX, Inc. v. Cisco Sys.</i> , 767 F.3d 1308 (Fed. Cir. 2014) .....	13
<i>Whitserve, LLC v. Computer Packages, Inc.</i> , 694 F.3d 10 (Fed. Cir. 2012) .....	21
<b>Statutes</b>	
35 U.S.C. §284.....	8
<b>Other Authorities</b>	
Rule 702 .....	<i>passim</i>

### **TABLE OF EXHIBITS**

<b>EX #</b>	<b>PROD #</b>	<b>DESCRIPTION</b>
1		Excerpts from Opening Expert Report of Stephen A. Holzen (dated July 23, 2020)
2		Excerpts from Responsive Expert Report of Stephen A. Holzen (dated Sept. 4, 2020)
3		Excerpts from Fuma's Supplemental and Consolidated Responses to Reynolds's ROGs (Nos. 1-16), dated July 13, 2020
4		Excerpts from Invalidity Expert Report of Dr. John M. Collins (dated July 23, 2020)
5		Excerpts from Reply Expert Report of Dr. John M. Collins (dated Sept. 4, 2020)
6	RJRV- F000322484-85  RJRV- F000322672-79	SOLO Package Inserts
7	RJRV- F000701644-45	CIRO marketing material
8		U.S. Patent No. 9,609,893
9	RJRV- F000684461	Potter 6/29/2010 email
10		Potter Dep. Ex. 44
11		Excerpts from Deposition of Dennis Potter dated June 29, 2020
12		Excerpts from Expert Report of Carrie Distler (dated August 21, 2020)

## I. INTRODUCTION

The opinion of Fuma’s damages expert, Stephen A. Holzen, is based upon a fundamental and critical error that grossly inflates Fuma’s damages claim and renders Mr. Holzen’s opinions inadmissible. Mr. Holzen failed to reliably separate the incremental value of the claimed invention from the unpatented features that drive sales of the accused products, as the law requires. *See, e.g., Exmark Mfg. Co. Inc. v. Briggs & Stratton Power Prods.*, 879 F.3d 1332, 1348 (Fed. Cir. 2018) (“[T]he ultimate reasonable royalty award must be based on the incremental value that the patented invention adds to the end product.” (quoting *Ericsson, Inc. v. D-Link Sys., Inc.*, 773 F.3d 1201, 1226 (Fed. Cir. 2014))).

Fuma did not invent the e-cigarette, nor did it invent a new or improved e-cigarette component. Instead, the asserted claims are directed to an allegedly new arrangement of conventional e-cigarette components – a heating element and wick positioned “in or around” a central airflow passageway (hereinafter the “patented arrangement”) – that purportedly provides a better user experience. In opining that Fuma is entitled to a “reasonable royalty” equal to 14% of Reynolds accused product revenues<sup>1</sup>, Mr. Holzen fails to apply a reliable methodology that identifies the

---

<sup>1</sup> Mr. Holzen’s reasonable royalty is based upon “net” product revenues.

**incremental value** (if any) the patented arrangement adds to the unpatented features in driving sales of the accused products.

Mr. Holzen's proposed expert testimony is inadmissible under Rule 702 for several reasons. First, in arriving at his "apportioned" 14% royalty rate, Mr. Holzen employs a bill of materials ("BOM") analysis that irrationally assumes the **cost** of certain product components is a reliable proxy for the incremental **value** of the patented arrangement. The assumption that component costs reflect the incremental value of the patented arrangement is not based on sufficient facts or data or the product of reliable principles and methods, but instead relies exclusively on Mr. Holzen's say-so. On this basis alone Mr. Holzen's damages opinion should be excluded. Second, even **if** component costs were a reliable proxy for the incremental value of the patented arrangement, Mr. Holzen's BOM methodology fails to account for the value of Reynolds's modifications to the individual components and the other features added by Reynolds, all of which are unrelated to the patented arrangement, in driving sales of the accused products. By failing to apportion out Reynolds's contributions, Mr. Holzen overstates the value of the patented arrangement. Third, Mr. Holzen's application of the *Georgia-Pacific* factors "fail[s] to adequately tie the expert's proposed reasonable royalty rate [14%] to the facts of this case." *Exmark*, 879 F.3d at 1349. And fourth, Mr. Holzen's opinion that the patented arrangement

drives consumer demand for the accused products addresses the wrong time frame and fails to link consumer demand to the patented arrangement.

Mr. Holzen's unreliable and result-driven BOM apportionment methodology overstates the value of the patented arrangement and leads to a grossly inflated royalty rate that would vastly overcompensate Fuma for Reynolds's use of the patented arrangement. Under Rule 702 and *Daubert*, this Court should exercise its "gatekeeping responsibility" to exclude the unsupported and unreliable expert testimony of Mr. Holzen on damages.

Finally, even **if** he is permitted to testify, Mr. Holzen's "lump-sum" alternative that seeks a one-time payment (in lieu of a running royalty) equal to 14% of Reynolds's past and "projected" future sales through patent expiration in 2030 should be excluded. Mr. Holzen's lump-sum alternative is unreliable because it is based upon highly speculative and unlikely future sales. It is also highly prejudicial because it a thinly veiled attempt to sway the jury with infringing sales of approximately [REDACTED], over 80% of which are purported **future** sales that are extremely unlikely to happen. *See Uniloc USA, Inc. v. Microsoft Corp.*, 632 F.3d 1292, 1320 (Fed. Cir. 2011) (disclosure of a company's billion-dollar revenues "cannot help but skew the damages horizon for the jury").



## II. STATEMENT OF FACTS

### A. The Patented Arrangement

Fuma's asserted claims are directed to an allegedly new and improved arrangement of conventional e-cigarette components. According to Mr. Holzen, the "foundational concept" is locating "a wicking material and a heating element in or around the central axial [airflow passageway]." (Ex.1, ¶77.<sup>2</sup>) Other than this "foundational concept," Fuma acknowledges that the asserted claims merely recite a collection of conventional e-cigarette components that were found in the prior art Smoke Fifty-One Duo device, including for example a power source, a cartridge housing, e-liquid, a solution holding medium for holding the e-liquid, a heating element, a central airflow passageway, and a threaded electrical connection for mechanically and electrically coupling the cartridge housing to the power source.<sup>3</sup> (Dkt.1-1 at 18-19 ('604 patent, claims 4, 6, 12, 14, 16, and 18); Dkt.1-1, Civil Action No. 1:19-cv-660, at 18 ('881 patent, claims 1 and 8); Ex.3, Fuma's Supplemental and Consolidated Response to ROG 12; *see also* Ex.4, ¶¶9-10, 51-81.)

---

<sup>2</sup> Excerpts of Mr. Holzen's Opening and Reply Reports dated July 23, 2020 and September 4, 2020, respectively, are attached as Exhibits 1 and 2.

<sup>3</sup> Fuma asserts claims 4, 6, 12, 14, 16, and 18 of U.S. Patent No. 9,532,604 (the '604 patent) and claims 1 and 8 of U.S. Patent No. 10,334,881 ("the '881 patent"). The allegedly "foundational concept" is not embodied in every asserted claim, but for purposes of this motion only Reynolds does not dispute Mr. Holzen's assumption.

## **B. Reynolds's Accused Products**

The accused SOLO and CIRO products comprise conventional e-cigarette components that Reynolds modified and include other added features that are unrelated to Fuma's asserted claims. For example, Reynolds's accused products include proprietary e-liquids, SOLO's heat-resistant substrate for storing e-liquid, SOLO's heater-wick assembly, SOLO's patented "QuickConnect" feature, SOLO's "Smart Technology," which provides a "a perfect puff, first time, every time," CIRO's transparent cartridge, and CIRO's ceramic wick, among other features that are unrelated to the patented invention. (*E.g.*, Ex.4, ¶¶402-407; Dkt.120-1, ¶¶227, 231-34, 238, 241, 285, 287, 294, 297-99; Ex.5, ¶39; Ex.6, RJRV-F000322673,-75,-77; Ex.7, RJRV-F000701644-45.)

## **C. Mr. Holzen's BOM Methodology**

To recover patent damages, the patentee is obligated to apportion the incremental value of the patented invention as distinguished from the unpatented features that drive sales of the accused products. The patentee must apportion the royalty base, the royalty rate, or both. *Exmark*, 879 F.3d at 1348. Mr. Holzen nominally elected to apportion the royalty rate.

In a purported effort to apportion the royalty rate so that it reflects the incremental value (if any) of the patented arrangement, Mr. Holzen conducts what he describes as a BOM analysis. (Ex.1, ¶¶186-188; Ex.2, ¶90.) Mr. Holzen assumes

that eight components (highlighted in yellow below) from the SOLO's BOM "relate to" the claimed invention. (Ex.1, ¶¶186-188, Exhibit 19 (annotated below).)

<b>Bill of Materials: Solo Cartridge</b>	
Source: RJRV-F000701441	
<b>Cost Per Unit</b>	<b>2017</b>
Case	\$ [REDACTED]
Carton	[REDACTED]
Box	[REDACTED]
Label	[REDACTED]
E-Liquid	[REDACTED]
End Cap	[REDACTED]
Base	[REDACTED]
Terminals	[REDACTED]
Heater Wick	[REDACTED]
Flow Tube	[REDACTED]
External Tube	[REDACTED]
PCB	[REDACTED]
Substrate	[REDACTED]
Blister Lidding	[REDACTED]
& Forming Web	[REDACTED]
Adhesive	[REDACTED]
Direct Labor	[REDACTED]
Overheads	[REDACTED]
<b>Total</b>	<b>\$ [REDACTED]</b>

Mr. Holzen observes that the eight selected components constitute [REDACTED] of the total manufacturing cost of the SOLO cartridge (excluding direct labor and overheads) (i.e., [REDACTED] and applies the [REDACTED] figure to Reynolds's 2017 gross profit margin for the accused products ([REDACTED] to arrive at a 14% "apportioned" royalty rate. (*Id.*, ¶188; Ex.2, ¶90.) Mr. Holzen then applies this "apportioned" rate to Reynolds's accused product revenues to arrive at

a damage claim ranging from about [REDACTED] for Reynolds's alleged use of the patented arrangement. (Ex.1, ¶¶19-20.<sup>4</sup>)

### III. LEGAL STANDARD

Expert testimony is admissible only if it is both relevant and reliable. *Daubert v. Merrell Dow Pharms., Inc.*, 509 U.S. 579, 589 (1993). Not only must the testimony be “based on sufficient facts or data,” but also it must be the “product of reliable principles and methods . . . reliably applied . . . to the facts of the case.” FED. R. EVID. 702. Expert testimony that amounts to nothing “more than subjective belief or unsupported speculation” must be excluded. *Daubert*, 509 U.S. at 590; *see also E.E.O.C. v. Freeman*, 778 F.3d 463, 466 (4th Cir. 2015). The same is true for testimony not sufficiently tied to the facts of the case. *Daubert*, 509 U.S. at 591. The district court serves a “gatekeeping role” by ensuring that expert testimony is admitted only if it meets the threshold requirements of relevance and reliability. *Sundance, Inc. v. DeMonte Fabricating Ltd.*, 550 F.3d 1356, 1360 (Fed. Cir. 2008) (quoting *Daubert*, 509 U.S. at 597).

---

<sup>4</sup> Mr. Holzen's range depends on whether he applies a running royalty through trial (which results in a royalty at the lower end of the range) or his alternative lump sum royalty (which results in a royalty at the higher end of the range) that is based upon past and highly questionable projections of future sales through patent expiration in 2030.

If a patent is valid and infringed, the patentee may seek “damages adequate to compensate for the infringement, but in no event less than a reasonable royalty **for the use made of the invention** by the infringer.” 35 U.S.C. §284 (emphasis added). A reasonable royalty is determined through the lens of a hypothetical negotiation between the parties at the time the infringement began. *Uniloc USA*, 632 F.3d at 1312. The reasonable royalty calculation is the product of two elements: (1) the royalty base and (2) the royalty rate. Consistent with Rule 702, the patentee bears the burden of showing that the proffered expert damages testimony is both relevant and reliable. *Suffolk Techs. LLC v. AOL Inc.*, No. 1:12-cv-625, 2013 U.S. Dist. LEXIS 64630, at \*2 (E.D. Va. Apr. 12, 2013); *see also IP Innovation L.L.C. v. Red Hat, Inc.*, 705 F. Supp. 2d 687, 689 (E.D. Tex. 2010) (Rader, C.J.) (“A reliable reasonable royalty calculation depends on trustworthy evidence of both the royalty base and the royalty rate.”)

In calculating patent damages, the patentee **must** apportion the value of the patented invention from the value of the accused product’s unpatented benefits and features in driving sales. As the Federal Circuit has repeatedly warned, “our law recognizes that a reasonable royalty award ‘must be based on the incremental value that the patented invention adds to the end product.’” *Exmark*, 879 F.3d at 1348 (Fed. Cir. 2018) (quoting *Ericsson*, 773 F.3d at 1226). Thus, where the patented invention represents an improvement to existing products, the patentee is only entitled to a

royalty based on the incremental value provided by the patented improvement. *Lucent Techs., Inc. v. Gateway, Inc.*, 580 F.3d 1301, 1337 (Fed. Cir. 2009). The value of a product’s features and benefits unrelated to the patented improvement must be considered in the apportionment analysis unless the patentee can show with “sound economic reasoning” that they play no role in driving demand for the accused product. *Exmark*, 879 F.3d at 1350 (expert’s conclusion unsupported by “sound economic reasoning” that “other components do not affect the value of the accused mower amounts to nothing more than speculation”); *see also Power Integrations, Inc. v. Fairchild Semiconductor Int’l, Inc.*, 904 F.3d 965, 978-79 (Fed. Cir. 2018) (“If the product has other valuable features that also contribute to driving consumer demand – patented or unpatented – then the damages for patent infringement must be apportioned to reflect only the value of the patented feature.”).

A damages opinion that is based upon an unreliable apportionment methodology must be excluded. *See Exmark*, 879 F.3d at 1349-51 (district court erred by failing to exclude damage model that was based upon an unreliable apportionment methodology). The failure to reliably apportion is not the type of defect that is entrusted to cross-examination. *See Rembrandt Social Media, LP v. Facebook, Inc.*, 22 F.Supp.3d 585, 595 (E.D. Va. 2013) (unreliable apportionment methodology required exclusion of damage opinion notwithstanding the opportunity for cross-examination).

Similarly, damage models based on speculative sales projections that are contrary to reality are inadmissible. *See e.g., ePlus, Inc. v. Lawson Software, Inc.*, 764 F. Supp. 2d 807, 814 (E.D. Va. 2011) (rejecting expert testimony as irrelevant and unreliable where expert “does not explain why it was sound to project that the Ariba and SAP sales figures will continue for more than a decade into the future”); *Cf., e.g., MyGallons LLC v. U.S. Bancorp*, 521 F. App’x 297, 307 (4th Cir. 2013) (district court abused its discretion in admitting expert testimony on lost profits where “projections ignored business realities and relied on sheer speculation”).

#### **IV. ARGUMENT**

##### **A. Mr. Holzen’s Inflated Royalty Rate Improperly Fails To Measure The Incremental Value Of The Patented Arrangement**

Mr. Holzen’s “reasonable royalty” calculation applies a royalty rate to a royalty base consisting of Reynolds’s accused products’ revenues. Mr. Holzen attempts to calculate a royalty rate to which Reynolds and Fuma would have agreed during a hypothetical negotiation in January 2017, the date that the first of the two asserted patents issued. As explained below, Mr. Holzen’s methodology for determining the royalty rate is untethered from – and grossly overstates – the incremental value (if any) of the patented arrangement in driving sales of the accused products, resulting in an improper windfall for Fuma. Mr. Holzen’s reasonable royalty opinion should be excluded.

**1. Mr. Holzen's BOM Methodology Depends on Using Irrelevant Manufacturing Costs As An Unreliable Proxy For Patented Value**

Mr. Holzen's BOM methodology does not reliably capture the incremental value of the patented arrangement; indeed, it does not even attempt to capture it. The patented arrangement is not a new or improved e-liquid, cartridge end cap or base, electrical terminal, heating element, wick, flow tube, external tube or substrate. Thus, the question is not what Reynolds would have paid for a license to the eight components that Mr. Holzen identified. Reynolds was free to use these components without paying Fuma a penny. Instead, Mr. Holzen should have – but did not – measure the **incremental value** of the **patented arrangement** because it is only the patented arrangement that Fuma brought to the hypothetical negotiation. *See Lucent Techs.*, 580 F.3d at 1325 (“The hypothetical negotiation tries, as best as possible, to recreate the *ex ante* licensing negotiation scenario and to describe the resulting agreement”); *see also Uniloc USA*, 632 F.3d at 1318 (“[E]vidence . . . must be tied to the relevant facts and circumstances of the particular case at issue and the hypothetical negotiations that would have taken place in light of those facts and circumstances at the relevant time.”).

Mr. Holzen never explains how or why the manufacturing *cost* of the eight selected components reflects the **incremental value** of the patented arrangement in driving sales. Nor does he offer an economically reliable explanation for the notion



that the parties would have negotiated a royalty rate based upon component cost – a data point that is unrelated to the relative value (if any) of the patented arrangement in driving product sales. *Cf. Trell v. Marlee Elecs. Corp.*, 912 F.2d 1443, 1446–47 (Fed. Cir. 1990) (“[A] particular fee is not the correct measure of damages unless that which is provided by the patentee to its licensees for that fee is commensurate with that which the defendant has appropriated.” (quoting *Bandag, Inc. v. Gerrard Tire Co., Inc.*, 704 F.2d 1578, 1582 (Fed. Cir. 1983))). The analytical and logical gap between the data (component cost) and Mr. Holzen’s opinion (the incremental value of the patented arrangement as a sales driver) is far too great to be presented to the jury. *See, e.g., Syneron Med. Ltd. v. Invasix, Inc.*, No. 8:16-cv-00143-DOKES, 2018 WL 4696969, at \*5-6 (C.D. Cal. Aug. 27, 2018) (rejecting damages opinion where expert’s apportionment analysis was based on irrelevant valuation of patentee’s product); *TCL Commc’ns Tech. Holdings Ltd v. Telefonaktenbologet LM Ericsson*, No. CV 15-02370 JVS, 2017 WL 11598725, at \*7 (C.D. Cal. Feb. 2, 2017) (“TCL challenges whether the cost per mAh is an appropriate metric for assessing the incremental value which the Ericsson portfolio adds because battery life is inherent in each device and not a function of the 4G standard. This undercuts the relevance of the analysis.”); *see also Daubert*, 509 U.S. at 590.

Indeed, Mr. Holzen’s BOM methodology is no less arbitrary and is just as unreliable as the 25% rule and 50/50 profit split methodologies previously rejected

by the Federal Circuit. *See Uniloc USA*, 632 F.3d at 1315 (“the 25 percent rule of thumb is a fundamentally flawed tool for determining a baseline royalty rate”); *see also VirnetX, Inc. v. Cisco Sys.*, 767 F.3d 1308, 1333-34 (Fed. Cir. 2014) (“the suggestion that those profits be split on a 50/50 basis—even when adjusted to account for certain individual circumstances—is insufficiently tied to the facts of the case, and cannot be supported”). Mr. Holzen’s failure to appropriately measure damages is particularly acute given that the components included in his cost analysis are not exclusive to the patented arrangement – they also exist in other e-cigarettes. Accordingly, even if cost could somehow serve as a proxy for value – and it cannot – measuring the cost of the components in particular, rather than using some cost measure of the patented arrangement itself, **contributes** to the failure to assess incremental value, rather than resolving it. Mr. Holzen’s BOM **cost** methodology is nothing more than an arbitrary splitting of the profits based on an inherently unreliable back-of-the-napkin calculation, or as in this case, back-of-the BOM.

The unreliability of Mr. Holzen’s apportionment methodology is further demonstrated by the Federal Circuit’s opinion in *Exmark*. The claim in *Exmark* was directed to a multi-component lawn mower having an improved baffle and other conventional components. As the Federal Circuit noted, the patentee’s damages expert was required to apportion the damages between the patented improvement (*i.e.*, the baffle) and the claimed conventional components so that Exmark was

compensated **only** for the improved baffle and not the entire lawn mower. 879 F.3d at 1348. In reversing the damages verdict, the Federal Circuit determined that the expert's apportionment analysis failed to quantitatively link the apportioned 5% royalty rate to the incremental value of the improved baffle in the accused lawn mowers. *Id.* at 1350. Mr. Holzen's apportioned 14% royalty rate suffers from the same fatal infirmity: he fails to reliably link it to the incremental value of the patented arrangement in driving sales of the accused SOLO and CIRO products.

This failure alone requires exclusion of Mr. Holzen's reasonable royalty opinion, but there are numerous other reasons his BOM methodology is unreliable.

**First**, Mr. Holzen's BOM methodology artificially inflates his value estimate by including the cost of conventional components such as the e-liquid, cartridge end cap and base, the electric terminals, external tube and substrate—all of which are unrelated to the “foundational concept” of the patented arrangement (a heating element and wick in a central airflow passageway). By including these five components Mr. Holzen inflates his apportioned royalty rate by 74%.<sup>5</sup>

**Second**, Mr. Holzen's conflation of component cost with the value of the patented arrangement inflates the royalty rate where more costly components are used in the accused products, even though the choice of components has nothing to

---

<sup>5</sup> These five components constitute 74% of the cost of the eight selected components ( [REDACTED] ).

do with the value of the patented arrangement. For example, the stainless-steel cartridge housing, which was only used in the SOLO Gen 1 cartridge (which Reynolds commercialized before the patents-in-suit issued), costs significantly more than the plastic housing incorporated in the SOLO Gen 2 cartridge (the predominant SOLO cartridge sold after the patent issued). (*See* Ex.1, Exhibit 19 to Holzen’s Opening Report, where the average cost of the housing (stainless tube) in year 2014 is █████ compared to year 2017 at █████ and year 2020 at █████.) Under Mr. Holzen’s unreliable methodology, the higher cost of SOLO Gen 1’s stainless-steel cartridge housing inflates the royalty rate. Mr. Holzen never explains why the material of the cartridge housing is relevant to the patented arrangement, and it plainly is not.

Similarly, if Reynolds had elected to use in the SOLO device, for example, a less expensive, “off the shelf” e-liquid (rather than its own proprietary formula); or if Reynolds had used an ordinary screw thread connection (instead of its own patented connector assemblies); or if Reynolds had used simple wiring to connect the heating element to the electrical wiring (instead of the unique terminal post assembly), each of these components would have been less costly, and would ultimately result in a lower “apportioned” royalty rate, under Mr. Holzen’s faulty analysis.

**Third**, component cost is demonstrably not a reliable proxy for the incremental value of the patented arrangement in driving sales. According to Mr. Holzen's flawed methodology, the SOLO Gen 1's stainless-steel cartridge housing (which cost on average [REDACTED] in 2017) is eight times more valuable in driving sales than Reynolds's proprietary e-liquid (which cost on average [REDACTED] in 2017). (*Id.*) Mr. Holzen offers no defense of this purported relationship. Moreover, Fuma did not invent a stainless-steel housing. Even if a stainless-steel housing plays some role in driving sales (there is no evidence that it does), Fuma cannot be compensated for something it did not invent. The same holds true for the other components identified in Mr. Holzen's BOM analysis.


## **2. Mr. Holzen's BOM Methodology Improperly Ignores Or Minimizes Reynolds's Contributions**

Even if cost were a reliable proxy (it is not), by including the *entire cost* (instead of an apportioned cost) of the eight identified components, Mr. Holzen improperly commingles the enhanced value of the components as modified by Reynolds with the purported value of the patented arrangement. The accused products include e-liquids, heating elements, wicking materials, substrates for holding the e-liquids, and mechanisms for electrically and mechanically coupling the power source to the cartridge that are manufactured and designed according to Reynolds's requirements. (*E.g.*, Ex.4, ¶¶402-407; Dkt.120-1, ¶¶227, 231-34, 238,

241, 285, 287, 294, 297-99; Ex.5, ¶39; Ex.6, RJRV-F000322673,-75,-77; Ex.7, RJRV-F000701644-45.) Yet, Mr. Holzen’s BOM analysis does not account for the value of these components in driving sales independent of the patented arrangement, effectively assigning their entire value as derived from the patented arrangement. At the very least, Mr. Holzen was obligated to apportion the cost of the selected components between their value in the patented arrangement as distinguished from the value Reynolds contributed to these components that are unrelated to the claimed invention. *See Exmark*, 879 F.3d at 1350 (expert opinion inadmissible because the apportionment analysis failed to, *inter alia*, consider the degree to which other components, durability, reliability, brand position, dealer support, and warranty impacted market value or profitability of the accused lawn mowers.); *see also Uniloc USA*, 632 F.3d at 1318 (“[T]he patentee . . . must in every case give evidence tending to separate or apportion the defendant’s profits and the patentee’s damages between the patented feature and the unpatented features, and such evidence must be reliable and tangible, and not conjectural or speculative.” (internal citation omitted)). Nothing in Mr. Holzen’s approach reliably separates out and quantifies those distinct values as the law requires.

Mr. Holzen also does not account for the other features that Reynolds added to the accused products in driving sales of the accused products, assigning them **zero** value as well. These features include, for example, the SOLO’s Smart Technology

that provides a “perfect puff, first time, every time” and Reynolds’s patented QuickConnect feature that provides “unique and easy to use interface” between the cartridge and power unit<sup>6</sup>, as well as other features that are unrelated to Fuma’s patents, as illustrated below.

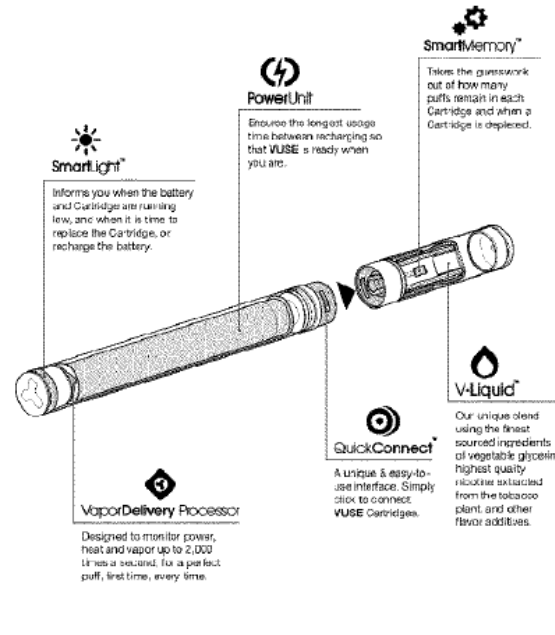


**VUSE**  
DIGITAL VAPOR CIGARETTES

Introducing the first truly Digital Vapor Cigarette, powered by Smart Technology for a **perfect puff, first time, every time.**

The first electronic cigarette that finally delivers.

### THE DIFFERENCE IN VUSE



- SmartLight**  
Inform you when the battery and Cartridge are running low, and when it is time to replace the Cartridge, or recharge the battery.
- PowerUnit**  
Ensure the longest usage time between recharging so that VUSE is ready when you are.
- SmartMemory**  
Takes the guesswork out of how many puffs remain in each Cartridge and when a Cartridge is depleted.
- V-Liquid**  
Our unique blend using the finest sourced ingredients of vegetable glycerin, highest quality nicotine extracted from the tobacco plant, and other flavor additives.
- QuickConnect**  
A unique & easy-to-use interface. Simply click to connect VUSE Cartridges.
- VaporDelivery Processor**  
Designed to monitor power, heat and vapor up to 2,000 times a second. For a perfect puff, first time, every time.

(Ex.6, RJRV-F000322485; *see also* Ex.4, ¶¶402-407; Dkt.120-1, ¶¶227, 231-34, 238, 241, 285, 287, 294, 297-99; Ex.5, ¶39; Ex.6, RJRV-F000322673,-75,-77; Ex.7, RJRV-F000701644-45.) Mr. Holzen’s failure to consider and account for the value

<sup>6</sup> The SOLO’s QuickConnect feature is covered by U.S. Patent No. 9,609,893. (Ex.8.)

of these features in driving sales of the accused products further overstates the incremental value of the patented arrangement. *See, e.g., Bmc Software, Inc. v. Servicenow, Inc.*, No. 2:14-CV-903-JRG, 2016 WL 379620, at \*3 (E.D. Tex. Feb. 1, 2016) (excluding opinion where expert “failed to properly apportion because he has failed to specify, distinguish, and then separate the value of BMC’s patented features from the unpatented features of ServiceNow’s products”); *see also SUNOCO Partners Mktg. & Terminals L.P. v. Powder Springs Logistics, LLC*, No. CV 17-1390-LPS-CJB, 2020 WL 7330715, at \*7 (D. Del. Jan. 13, 2020) (excluding opinion where expert did not “articulate[] why the value of the licensed patents drive demand for Sunoco’s customers”).

Even with respect to the three Reynolds contributions that he does acknowledge, Mr. Holzen does not reliably account for them in his BOM methodology. According to Mr. Holzen:

RJRV [Reynolds] has contributed its own manufacturing processes, has taken on the business risks of selling Fuma’s patented invention at a national scale and is managing the process of distributing the Accused Products through thousands of its retailer customers. . . .

(Ex.1, ¶186; *see also* Ex.2, ¶89.) Yet Mr. Holzen never explains why the items he excluded from the BOM analysis (*i.e.*, the case, carton, box, label, PCB (printed circuit board), and blister lidding) reliably capture the value of Reynolds’s manufacturing expertise and substantial distribution network in driving sales of the



accused products. Moreover, Mr. Holzen's BOM analysis simply ignores (and thus fails to apportion) the value of Reynolds's substantial marketing efforts in driving sales. *Cf. e.g., Procter & Gamble Co. v. Paragon Trade Brands, Inc.*, 989 F. Supp. 547, 605 (D. Del. 1997) (concluding that lost profits expert "properly focuses on the consumer level" by predicting that more consumers would purchase name brand and assuming that retailers would carry name brand). Again, the analytical gap between the data (the cost of the above-referenced items) and Mr. Holzen's opinion (the value of these Reynolds contributions as distinguished from the patented arrangement and other unpatented features in driving sales) is simply too great to be presented to the jury.

**B. Mr. Holzen's Consideration Of The *Georgia-Pacific* Factors Does Not Salvage His Unreliable Apportionment Methodology**

Although he gives them lip service, Mr. Holzen never quantitatively ties the *Georgia-Pacific* factors to his 14% royalty rate. More specifically, *Georgia-Pacific* factor 13 addresses apportionment; namely, the portion of the realizable profit that should be credited to the invention as distinguished from other contributors such as non-patented elements, the manufacturing process, business risks, or significant features or improvements added by the accused infringer. (Ex.1, ¶¶266-268). Mr. Holzen does not assess the role of the factor in calculating the royalty range or quantitatively link this factor to his 14% proposed rate, but instead qualitatively

opines only that factor 13 has a “downward influence” on the 14.0%-16.6% “apportioned” royalty range that Mr. Holzen determined using his unreliable BOM methodology.<sup>7</sup> (*Id.* at ¶¶266-68). This is an improper application of the *Georgia-Pacific* factors. *See Exmark*, 879 F.3d at 1349-50 (noting that a similarly “superficial recitation” failed to quantitatively tie the *Georgia-Pacific* factors to the proposed 5% royalty rate); *see also Whitserve, LLC v. Computer Packages, Inc.*, 694 F.3d 10, 31-32 (Fed. Cir. 2012) (“Expert witnesses should concentrate on fully analyzing the applicable factors, not cursorily reciting all fifteen. . . . Dr. Shapiro’s testimony and the arguments premised thereon encouraged the jury to reach a purely speculative judgment.”). Regardless, “[i]t is of no moment” that Mr. Holzen purports to apply the *Georgia-Pacific* factors given that he applies those factors to his fundamentally flawed cost-as-value analysis: “Beginning from a fundamentally flawed premise and adjusting it based on legitimate considerations specific to the facts of the case nevertheless results in a fundamentally flawed conclusion.” *Uniloc USA*, 632 F.3d at 1317.

---

<sup>7</sup> Mr. Holzen applied his BOM [REDACTED] ratio to Reynolds’s 2017 profit margin for the accused products [REDACTED] and for accused cartridges ([REDACTED]) to arrive at an “apportioned” royalty range of 14.0% to 16.6%. (Ex.1, ¶188.)

**C. Mr. Holzen’s Opinion That The Patented Arrangement Drives Demand For The Accused Products Is Also Unreliable and Inadmissible**

As the Federal Circuit has noted, it is the patentee’s burden to show that the patented feature forms the basis for consumer demand. *Power Integrations*, 904 F.3d at 979. “It is not enough to merely show that the [patented feature] is viewed as valuable, important, or even essential to the use of the [infringing product].” *LaserDynamics v. Quanta Computer, Inc.*, 694 F.3d 51, 68 (Fed. Cir. 2012). “Where the accused infringer presents evidence that its accused product has other valuable features beyond the patented feature, the patent holder must establish that these features do not cause consumers to purchase the product.” *Power Integrations*, 904 F.3d at 979.

Mr. Holzen fails to show that the patented arrangement drives sales let alone is the *sole* driver of consumer demand for the accused products to the exclusion of the features added by Reynolds. Instead, Mr. Holzen vaguely opines that the patented arrangement provides a “better user experience” as compared to “other e-cigarette products that pre-dated the Fuma invention [in 2009].” (Ex.1, ¶¶78, 141-142). Mr. Holzen’s opinion is inadmissible because it lacks a reliable analysis and addresses the wrong time frame.

Starting with the second point, comparing the patented arrangement to “other e-cigarette products” in 2009 is not the appropriate benchmark for assessing whether

the patented arrangement drives demand for the accused products. The relevant question, and what Reynolds and Fuma would have focused on at the hypothetical negotiation in January 2017, is the extent to which (if any) the patented arrangement drives demand for the accused products **in 2017** and thereafter. *E.g.*, *LaserDynamics*, 694 F.3d at 76 (stating that “the hypothetical negotiation framework” is meant to “discern the value of the patented technology to the parties in the marketplace when infringement began”). Mr. Holzen fails to address that question.

Mr. Holzen’s opinion that the patented arrangement drives consumer demand is unreliable for another reason. Rather than citing to consumer surveys or conducting an otherwise reliable analysis, Mr. Holzen instead cherry-picks out-of-context statements in a handful of Reynolds’s documents from the 2010-2012 timeframe, a few of which discuss a product sample that Fuma gave Reynolds in June 2010 to evaluate. (Ex.1, ¶¶141-147.). But Mr. Holzen does not conduct an analysis linking those statements to the patented arrangement, nor could he. These statements were directed to **unclaimed** features of the Fuma product sample. For example, the “absence of the sweet aftertaste” was attributed to “low levels” of propylene glycol (Ex.9), the increased vapor volume to the lack of a “timed delay cut off” (*Id.*), and the “unique heating element” and “new central flow design” referred to the thickness of the heating element (*i.e.*, a heavier gauge element) and

an elongated axially extending heating element that lacked an associated wick (Ex.10; Ex.11, PotterDepTr.279:13-283:10, 294:17-296:12). *See also LaserDynamics*, 694 F.3d at 69 (finding opinion unreliable because the expert “never conducted any market studies or consumer surveys to ascertain whether the demand for a laptop computer is driven by the patented technology”). These out-of-context snippets from 2010-2012 about the Fuma product sample do not address, much less show, that the **patented** arrangement – as distinguished from Reynolds’s unclaimed contributions – drove consumer demand for the accused products in 2017 and thereafter.

Mr. Holzen’s conclusory opinion that the patented arrangement drives consumer demand for the accused products is unreliable and should be excluded.

**D. Mr. Holzen’s BOM Methodology Is Unreliable When Applied To The CIRO**

The unreliability of Mr. Holzen’s BOM approach is further exacerbated by his application of the SOLO BOM analysis to the accused CIRO device. The components in the CIRO device are different from the components found in the SOLO device (*e.g.*, the heater wick assembly in the SOLO differs from the heater and ceramic wick in the CIRO). (*Compare* Dkt.122-1 at 25, *with* Dkt.122-2 at 27.) In addition, some of the SOLO components, such as the communications terminal contact and substrate, are not found in the CIRO device. (*Id.*) Mr. Holzen does not

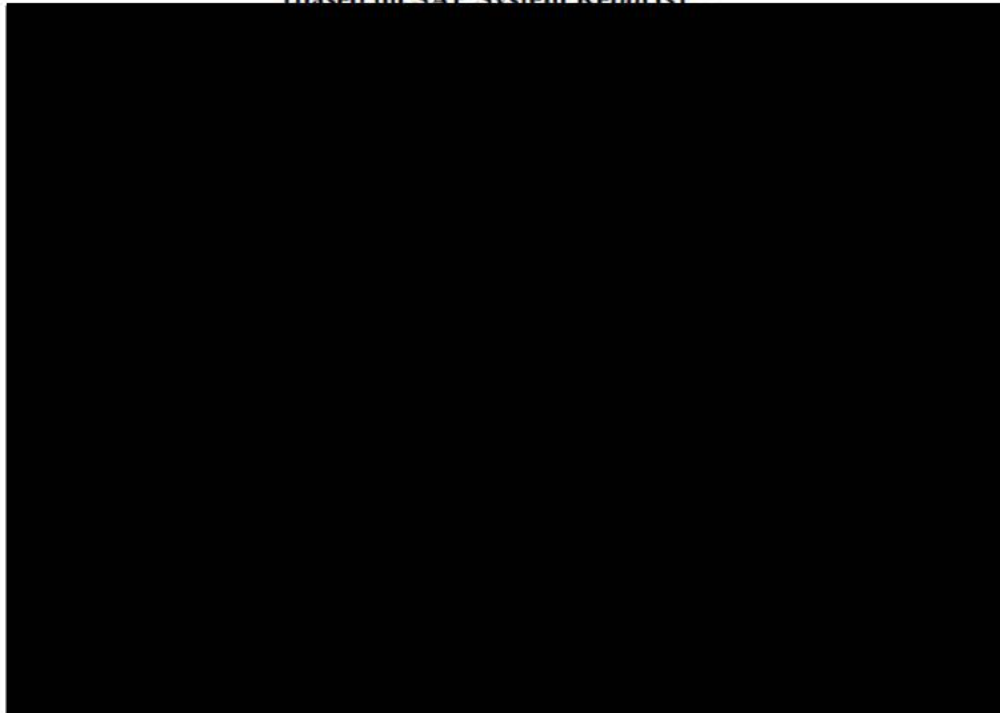
explain why his BOM analysis for the SOLO device reliably apportions the value of the patented combination in the CIRO device. *Cf., e.g., Lucent Techs.*, 580 F.3d at 1332 (reversing damages award where patentee failed to prove that licenses for other patents it relied on were sufficiently comparable to sustain award); *ePlus*, 764 F. Supp. 2d at 813-14 (rejecting expert opinion relying on prior settlement agreement licenses to calculate royalty rate where differences “make it difficult to find that the ‘fit’ component is met,” “further diminish[ing] the relevance” of those licenses). Mr. Holzen’s BOM analysis is unreliable for the SOLO; it is doubly unreliable when applied to the CIRO.

**E. Mr. Holzen’s Lump Sum Royalty Is Inadmissible Because It Is Based On Speculative And Highly Prejudicial Future Sales That Are Unlikely To Occur**

Mr. Holzen proposes a “lump-sum” reasonable royalty alternative that seeks a one-time payment for Reynolds’s past and “projected” future use of the claimed invention through patent expiration in 2030. In this alternative, Mr. Holzen combines past accused revenues of about [REDACTED] [REDACTED] with “projected” future accused revenues of from about [REDACTED] for a total revenue base ranging from about [REDACTED]. (Ex.2, ¶¶101-103). Mr. Holzen’s projections not only seek a windfall payment for future sales that are highly unlikely to occur, but also are contrary to reality. Although he projects an annual growth rate for the accused products that either increases at 3% (scenario 1) or 8% (scenario 2) or holds

steady at 0% (scenario 3) through patent expiration (Ex.1, ¶156; Ex.2, ¶106), actual sales tell a very different story. From 2017-2019, the accused SOLO product experienced a [REDACTED] compounded annual growth rate and the compounded annual growth rate for the SOLO and CIRO products combined was [REDACTED], as market preferences changed to other product designs, including Reynolds's un-accused and non-infringing ALTO e-cigarette product (which now comprises about [REDACTED] of Reynolds's e-cigarette sales). (Ex.12, ¶¶37, 78, 196).<sup>8</sup> The actual trends are illustrated in the chart below.

**Figure 8. VUSE Net Revenues by Solo, Vibe, Ciro, & Alto**  
(based on SAP System Reports)<sup>186</sup>



---

<sup>8</sup> At the time of the hypothetical negotiation, Reynolds was aware of the market's evolution away from products like the SOLO and was pursuing more versatile product designs such as products like the non-infringing Alto. (*Id.*, ¶¶33-34)

Mr. Holzen cites no evidence demonstrating that these negative trends for the SOLO and CIRO will reverse themselves through patent expiration in 2030, nor is there any. At bottom, Mr. Holzen's lump-sum alternative is a highly speculative and unreliable pretext for publishing a highly prejudicial [REDACTED] [REDACTED] royalty base to the jury. It also would provide Fuma a windfall for future infringing sales that are extremely unlikely to occur. It should be excluded. *See Uniloc USA*, 632 F.3d at 1320 (disclosure of a company's billion-dollar revenues "cannot help but skew the damages horizon for the jury, regardless of the contribution of the patented component to this revenue"); *see also ePlus*, 764 F. Supp. 2d at 814 (rejecting expert testimony as irrelevant and unreliable where expert "does not explain why it was sound to project that the Ariba and SAP sales figures will continue for more than a decade into the future," and questioning the validity of economic projections by "an expert who does not explain why use of the method is sound in perspective of the economic realities which appear during the projection period"); *Cf., e.g., MyGallons LLC*, 521 F. App'x at 307 (holding that district court abused its discretion in admitting expert testimony on lost profits where "projections ignored business realities and relied on sheer speculation").

**If**, post-verdict, Reynolds uses the claimed invention, the Court or the jury can set the financial terms of a running royalty going forward that pays Fuma for Reynolds's actual use of the patents, assuming the asserted claims are valid and



infringed (*e.g.*, X% of net revenues or X cents per unit). This approach will ensure that Fuma is only compensated for use made of the patented arrangement, and no more.

## **V. CONCLUSION**

Mr. Holzen's damage opinion is inadmissible under the standards of FRE 702 and *Daubert*. Mr. Holzen's royalty rate is based upon a result-driven and inherently unreliable apportionment methodology that fails to separate the incremental value of the patented arrangement from other unpatented benefits and features in driving sales of the accused products. In the end, Mr. Holzen's unreliable methodology grossly overcompensates Fuma for Reynolds's alleged use of the patented invention. Accordingly, the Court should grant Reynolds's motion and exclude Mr. Holzen's reasonable royalty opinion and testimony.

In addition, even **if** he is permitted to offer his damage opinion based upon the unreliable BOM methodology, Mr. Holzen's lump-sum alternative is highly speculative, unreliable and prejudicial and should be excluded.

Dated: July 8, 2021

/s/ John Morrow

John F. Morrow, Jr. (N.C. Bar No. 23382)

WOMBLE BOND DICKINSON (US) LLP  
One West Fourth Street  
Winston-Salem, NC 27101  
Telephone: (336) 721-3584  
Fax: (336) 733-8429  
John.Morrow@wbd-us.com

John D. Wooten IV, NCSB No. 51074  
Womble Bond Dickinson (US) LLP  
300 N. Greene St., Suite 1900  
Greensboro, NC 27401  
Telephone: 336.574.8090  
Fax: 336.574.4524  
JD.Wooten@wbd-us.com

/s/ Ralph Gabric

OF COUNSEL:

Ralph J. Gabric  
IL Bar No. 6198485  
ralph.gabric@haynesboone.com  
Laura Beth Miller  
IL Bar No. 6191408  
laura.miller@haynesboone.com  
Judy K. He  
IL Bar No. 6327020  
judy.he@haynesboone.com  
HAYNES AND BOONE, LLP  
180 N. LaSalle, Suite 2215  
Chicago, IL 60601  
Telephone: (312) 216-1620  
Fax: (312) 216-1621

Attorneys for  
Defendant/Counterplaintiff  
***R.J. REYNOLDS VAPOR COMPANY***

**CERTIFICATE OF SERVICE**

The undersigned hereby certifies that all counsel of record who are deemed to have consented to electronic service are being served with a copy of MEMORANDUM IN SUPPORT OF REYNOLDS'S MOTION TO EXCLUDE THE TESTIMONY AND OPINIONS OF STEPHEN A. HOLZEN ON DAMAGES through the Court's CM/ECF system on July 8, 2021. Any other counsel of record will be served by First Class U.S. mail on this same date.

Dated: July 8, 2021

/s/ John Morrow

**CERTIFICATE OF COMPLIANCE**

The undersigned certifies that this brief complies with the word count limitation of Local Rule 7.3(d).

Dated: July 8, 2021

/s/John Morrow